

Study: Laptop use tied to higher student scores

About 14,550 Henrico County high schoolers are utilizing computers

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At any moment during the school year, 40 percent of Henrico County high school students are using their county-issued laptop computers.

Students say they are learning more. And the results back them up.

Data released last month from the second of a three-year study of Henrico's laptop initiative show noticeable improvement from the previous year. Students engaged in more problem solving, research, communication, teamwork and community-based assignments, said Dale Mann, managing director of Interactive Inc., which evaluates the gains of electronic learning.

About 14,550 high school students in Henrico are issued Dell computers each year. Students, parents and teachers were questioned about their perceptions in the mixed-method study.

Students who made more use of laptops had higher scores in world history, biology, reading and chemistry than students who did not, but they scored lower in algebra and writing. Mann said that is because students are used to using calculator functions on

the laptop instead of the graphing calculator, and they are used to typing on the computer instead of writing on paper, which is what they had to do to take the Standards of Learning writing tests.

"Technology is the tool to teach critical thinking and problem solving," said Chris Corollo, director of staff development for the Henrico school system.

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According to Mann's research, students "continue to believe school is more fun and that they are more interested in school because of the laptops."

Students say their teachers lecture less and walk around the room, interacting with students more. They also report more group projects and differentiated instruction.

Teachers report using the laptops more frequently and cite morale benefits. They say they are using the computers more to analyze data, communicate and present new material.

The study found that 98 percent of all parents have allowed their children to take part in Henrico's laptop program. Of those, 81 percent say the schools have done a good job of integrating computers into instruction and are satisfied with Internet filtering.

Mann said the results show that the county has made marked improvement with the laptop initiative since he began the survey in 2005. "This is a record of accomplishment," he said.

The three-year study is believed to be the most comprehensive look at any public school system's use of laptop computers. The final report will be released this fall.

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